IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	Confirm. No.: 1940
HILDEBRAND et al.	Atty. Ref.: 2380-1295
Serial No. 10/538,350	TC/A.U.: 2617
Filed: June 10, 2005	Examiner: Khan, M.B.

For: ADAPTIVE CONTROL METHOD FOR OPERATING COMMUNICATIONS ENVIRONMENTS

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October 8, 2010

MAIL STOP AF
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants request review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the FIVE attached sheet(s).

An Amendment After Final responsive to the June 8, 2010 final office action was filed on August 24, 2010. A negative advisory action was mailed September 22, 2010.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application. Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /H. Warren Burnam, Jr./

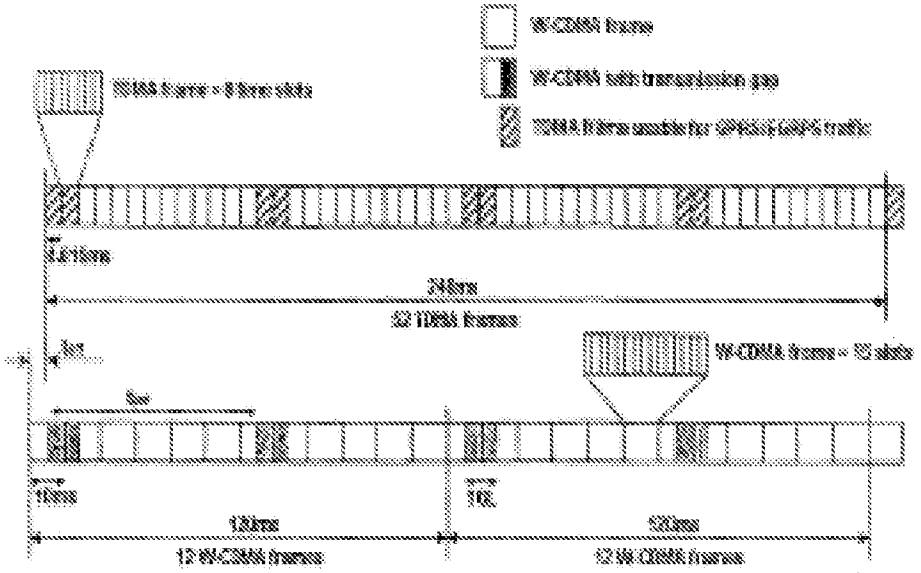
H. Warren Burnam, Jr.
Reg. No. 29,366

HWB:lsh
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

REASONS FOR REVIEW

A. SELECTED COMMENTS REGARDING THE DISCLOSURE

As illustrated by Applicants' Fig. 9, transmission gaps of the first communication resources (depicted by darkened portions of the WCDMA frames) are used for communications according to the second communications standard type (the striped portions of the TDMA frames).

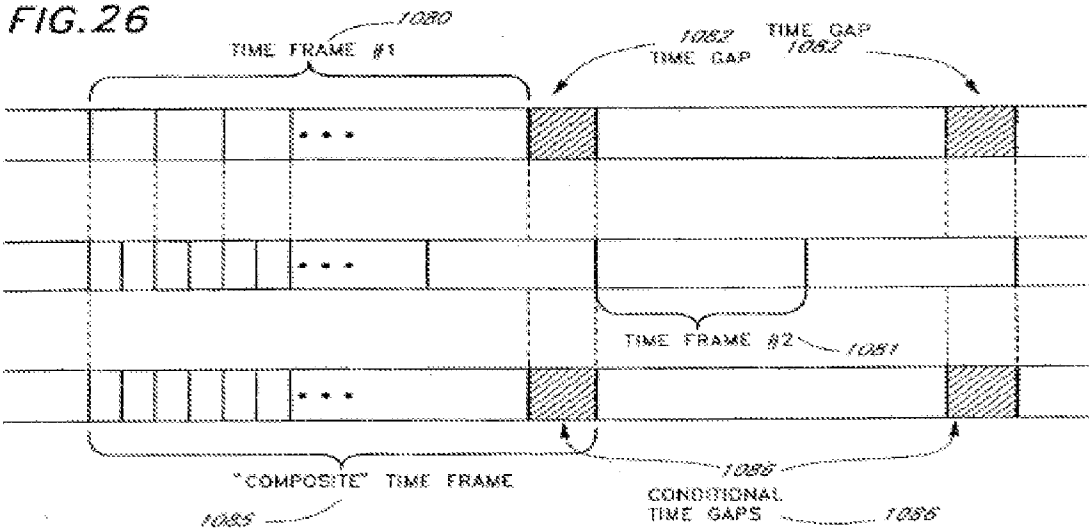


B. THE APPLIED REFERENCES

U.S. Patent 5,732,076 to Ketseoglou teaches a "composite time frame" which can be divided into time slots for use with a first protocol (such as TDD communications), and the remaining portion of the composite frame is divided into time slots for use with a second protocol (such as GSM). *See,* col. 21, lines 41 *et seq* including lines 65 *et seq*. Ketseoglou Fig. 26 illustrates such a composite time frame, including time frame #1 and time frame #2. The composite time frame is constructed so that an integral number of each time frame type (time frame #1 and time frame #2) fit into the composite time frame. That is, the Ketseoglou composite time frame "should be of a duration sufficient to fit an integral number of both the first and second time frames from which the composite time frame may be derived". Col. 23, lines 63 *et seq*.

REASONS FOR REVIEW

FIG. 26



In the embodiment of Fig. 26 (cited by the office action), Ketseoglou describes a situation in which time gaps may have to be inserted into his composite so that two of the second time frames have the same duration as a single first time frame (see, e.g., col. 24, lines 6 *et. seq*). Such gaps are only utilized to structure the composite time frame so that an integral number of each time frames fit within the composite time frame (col. 24, lines 9 et. seq). For the example of Fig. 26, two of the second time frames 1081 have the same duration as a single first time frame 1080 plus the time gap 1082 (col. 24, lines 18- 20). Thus, the time gap 1082 is not really a part of either second time frame 1081 or first time frame 1080.

Ketseoglou's gaps (used only for providing an appropriate accommodating size of the composite time frame) are clearly disfavored by Ketseoglou. For example, Ketseoglou states that the use of time gaps generally results in some inefficiency because a portion of the timeline is wasted, and may also lead to less flexibility. *See,* col. 24, lines 34 *et seq*.

The office action admits that Ketseoglou does not disclose "using the at least one transmission gap (TG) for communications according to the second communications standard for transmitting data of the second communications in the at least one transmission gap".

To remedy the deficiencies of Ketseoglou the Final Office Action turns to US Patent Publication 2003/0031143 to Faerber, citing particularly a portion (paragraphs [0027] –

[0029]) of Faerber which deals with transmission gaps being used for performing RSSI measurements and decoding. However, as explained beginning with Faerber paragraphs [0009], the transmission gaps referenced by Faerber are interludes that occur when a transmitter stops transmitting (when in a compressed mode) so that the unit to which the transmitter belongs can listen to another frequency and make the necessary measurements with respect to the other frequency. As stated in Faerber paragraphs [0011], the "subscriber station can tune the receiving device to another frequency band and receive and evaluate signals transmitted therein". According to Faerber, "knowledge of the time structure of the synchronization channel of the second radio communication systems, which supports a GSM transmission method for example, can be used here for targeted insertion of transmission pauses, so-called transmission gaps, into the continuous data transmission in order to receive and evaluate the synchronization channel of the parallel radio communication system." *See,* e.g., Faerber ¶[0029].

C. PATENTABILITY OF THE CLAIMS

Applicants respectfully submit that Ketseoglou and Faerber are not properly combineable for several reasons, and that even combineable arguendo the alleged combination fails to teach or suggest all claim limitations.

1. **Ketseoglou clearly already has a composite frame structure which adequately accommodates both types of time frames.** Ketseoglou Fig. 6 shows that both time frame 1 and time frame 2 are clearly accommodated. Moreover, Ketseoglou states that "…the particular composition of the composite time frame – i.e., the ratio of the first time slots to the second time slots, and the specific order thereof—can be matched to the specific system need. *See,* col. 22, lines 52 *et seq*. This statement attests to the sufficiency of the Ketseoglou composite time frame for both time frame types. In view of Ketseoglou's ample accommodation of both types of time frames, the person skilled in the art would not need to turn to Faerber for its alleged teaching of gaps in which to (allegedly) accommodate the second time frame type.

2. **Ketseoglou's use of gaps is only to provide proper spacing in the composite time frame**. As explained above, Ketseoglou certainly does not need to use gaps for transmission of a second protocol. Moreover, since Ketseoglou disfavors gaps the person skilled in the art would not combine Ketseoglou with a gap-intensive teaching like U.S. Publication 2003/0031143 to Faerber.

3. **Whereas Ketseoglou sufficiently accommodates both time frame types, the purpose of Faerber is to listen to the GSM radiocommunication system only for purposes of inter-system handover.** That is, Faerber listens in a gap to transmissions of another radiocommunication system to determine whether the listener should transfer to that other radiocommunication system. *See,* e.g., Faerber ¶¶[0008] and [0011]. The objectives of Ketseoglou and Faerber are thus entirely dissimilar.

4. **In its listening gap Faerber only takes measurements of a control channel, i.e., a synchronization channel, of the parallel radiocommunication system** (e.g., the GSM system). *See,* e.g., ¶¶[0020] and [0029]. As such, even if combineable the Ketseoglou/Faerber combination fails to teach or suggest the claim limitation of (for example) independent claim 1 ("using the at least one transmission gap for communications according to the second communications standard type for transmitting *data* of the second communications in the at least one transmission gap") or of independent claim 51 ("…include, in the at least one transmission gap prescribed by the first communications standard, *data* of at least a portion of the second frame structure for the second communications…).

5. **Both Ketseoglou and Faerber require insertion of special gaps or pauses to accommodate their (dissimilar) objectives**. *See,* e.g., Faerber ¶[0029] which refers to "targeted insertion of transmission pauses…". The extraordinary insertion of gaps or pauses runs afoul of applicants' requirement (see, e.g., independent claim 51) that the first communications *standard prescribing a first frame structure including at least one transmission gap*.

6. **The alleged Ketseoglou/Faerber combination fails to teach or suggest limitations** such as the following (examples taken from independent claim 1 and independent claim 51, respectively):

(from claim 1)… "wherein a number of slots or frames of a second frame structure of the second communications standard type is dependent upon the number and the duration of the at least one transmission gap of the first frame structure."

(from claim 51)… "wherein a number of usable slots or frames of the second frame structure is dependent upon the number and the duration of the at least one transmission gap of the first frame structure".

REASONS FOR REVIEW

Faerber has no teaching regarding dependency of the second frame structure on "the at least one transmission gap of the first frame structure". Whereas Faerber's transmission pauses or gaps for the FDD system may have to be targeted, Faerber's GSM operation is entirely oblivious to – independent from -- the FDD system. *See,* e.g., Faerber ¶[0017]. The signals upon which Faerber's RSSI measurements are performed are signals from another unit (e.g., another base station, e.g., a listened-to base station). There is no constraint that such signals listened to for RSSI measurements be sent by the listened-to base station only during the transmission gaps of a protocol of the listening base station. In fact, the listened-to base station is oblivious to the protocol and thus the frame structure of the listening base station.